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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/903,944	07/31/1997	TAU-SAN CHOU	089166/0107	3007

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MCDONNELL BOEHNEN HULBERT & BERGHOFF
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

EXAMINER

FOX, DAVID T

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 09/26/2003

41

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

08/903,944

Applicant(s)

CHOU ET AL.

Examiner

David T. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2003 and 18 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45, 47-106 and 108-112 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 97 is/are allowed.
- 6) ☒ Claim(s) 6-37, 39-45, 47-71, 73-96, 98-106 and 108-112 is/are rejected.
- 7) ☒ Claim(s) 38 and 72 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicants' amendments of 18 June 2003 and arguments of 7 February 2003 have overcome all rejections under 35 USC 112, second paragraph; and all art rejections except as indicated below for claims 101 and 104.

Claims 6-37, 39-45, 47-71, 73-96, 98-100, 102-103, 105-106 and 108-112 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for claims limited to a microprojectile-mediated method of transforming poinsettia and to plants produced by that method, does not reasonably provide enablement for claims broadly drawn to any method of transforming poinsettia including *Agrobacterium*-mediated methods or any transgenic poinsettia plant produced by any method. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims, as stated on pages 3-5 of the last Office action.

Claims 73-75, 83 and 85 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, as stated on pages 5-6 of the last Office action.

Claims 101 and 104 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Preil et al taken with Lelu et al and DeWald et al, in light of Hartmann et al and Lee et al, as stated on pages 7-9 of the last Office action for claims 1, 97, 101, 104, 113 and 116.

Claims 1-45, 47-100, 102, 103, 105-106 and 108-112 are deemed free of the prior art, given the failure of the prior art to teach or reasonably suggest the particularly claimed method steps and medium additions for tissue culturing poinsettia via somatic embryogenesis to obtain whole plants, and given the failure of the prior art to teach or reasonably suggest a method for obtaining whole transformed poinsettia plants.

Claims 38 and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-5 and 97 are allowed.

Applicants' arguments filed 7 February 2003, insofar as they pertain to the rejections above, have been fully considered but they are not persuasive.

Applicants urge that the scope of enablement rejection is improper, given the failure of the references cited by the Examiner to demonstrate that the instant *Euphorbia* species is not susceptible to the instant *Agrobacterium* species, and given the knowledge in the art that poinsettia is indeed susceptible to *Agrobacterium* as evidenced by Simone et al (APNet, Diseases of Poinsettia) appended to the amendment of 7 February 2003.

The Examiner maintains that he has cited several scientific publications which demonstrate that related *Euphorbia* species were recalcitrant to *Agrobacterium tumefaciens* infection, and that poinsettia is recalcitrant to infection by a closely related *Agrobacterium* species. This evidence is more probative than mere assertions by Applicants themselves that poinsettia is in fact susceptible to *Agrobacterium tumefaciens*.

Regarding the APSNet website, the Examiner notes that the only reports of crown gall disease (i.e. *Agrobacterium tumefaciens* infection) of poinsettia were reported in 1907 and 1942. The Examiner was unable to recover any articles published within the last fifty years that reported such results. Applicants are directed to DeCleene et al (1976), who teach that past methods of determining susceptibility to *Agrobacterium tumefaciens* were limited by the sole reliance upon visual symptoms which were poorly distinguishable from controls; and who teach that most members of the Euphorbiales family are not susceptible to *Agrobacterium tumefaciens*, as determined by the authors' more scientific methods (see, e.g., page 391, third full paragraph; page 392, penultimate paragraph; page 394, Figure 1 [see Legend for explanation of shaded versus white areas of the pie charts]; and page 399, Figure 5).

Applicants urge that the written description rejection is improper, given the teachings in *Enzo Biochem* that a demonstration of correlation of structure and function may be sufficient to provide an adequate written description, and given the teachings in *Amgen* that vertebrate cells and mammalian cells were adequately described.

The Examiner maintains that the rejected claims read on a multitude of unspecified transgenes of unspecified function. Thus, there is no function with which to correlate structure. Furthermore, no demonstration of correlation of conserved structure (i.e. conserved gene sequence) has been demonstrated between transgenes that confer a multitude of divergent traits such as insect resistance, modified flowering or plant growth habit, disease resistance, fatty acid accumulation, carbohydrate accumulation, etc. See MPEP 2163.

Regarding *Amgen*, the Examiner maintains that different fact patterns were involved. In *Amgen*, the description of various types of cells that harbored a single EPO-encoding transgene was questioned and ultimately confirmed. In contrast, the instant claims are not limited to a cells comprising a single transgene encoding a single product, but are instead broadly drawn to a multitude of non-exemplified, unspecified transgenes encoding a multitude of unspecified and unrelated products.

Applicants urge that the first obviousness rejection is improper, given the failure of the prior art to teach or reasonably suggest the use of casein hydrolysate or the use of both a developmental medium and a maturation medium. The Examiner maintains that the rejected claims are not drawn to the use of casein hydrolysate. Furthermore, "developmental medium" and "maturation medium" are mere names of media, which do not in and of themselves characterize or distinguish the media from the prior art media. It is the components of said media that are required to distinguish them. The developmental medium is merely characterized as containing an osmotic pressure increasing agent (such as sucrose) and any cytokinin, both taught in the prior art as

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stated previously. The maturation medium is merely characterized as comprising abscisic acid, whose use in poinsettia embryogenesis was suggested by Preil et al and taught by Lelu et al and DeWald et al in a multitude of unrelated plant species, as stated previously.

See In re Lindner, 173 USPQ 356 (CCPA 1972) and In re Grasselli, 218 USPQ 769 (Fed. Cir. 1983) which teach that the evidence of nonobviousness should be commensurate with the scope of the claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

September 22, 2003

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180-1638



GROUP 180
PRIMARY EXAMINER
DAVID T. FOX